APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,860	03/12/2004	Vipul V. Prakash	2710.007US1	1747

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EXAMINER
SWEARINGEN, JEFFREY R

ART UNIT	PAPER NUMBER
2445	

NOTIFICATION DATE	DELIVERY MODE
07/21/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
request@slwip.com

	Application No.	Applicant(s)
Office Action Summary	10/799,860	PRAKASH, VIPUL V.
	Examiner	Art Unit	
	Jeffrey R. Swearingen	2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 May 2011</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-11 and 13-20</u> is/are rejected.

7)☒ Claim(s) <u>12</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office

action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since

this application is eligible for continued examination under 37 CFR 1.114, and the fee

set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has

been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 5/26/2011

has been entered.

Information Disclosure Statement

2.   The information disclosure statement filed 5/26/2011 fails to comply with 37 CFR

1.98(a)(3) because it does not include a concise explanation of the relevance, as it is

presently understood by the individual designated in 37 CFR 1.56(c) most

knowledgeable about the content of the information, of each patent, publication, or other

information listed that is not in the English language. It has been placed in the

application file, but the information referred to therein has not been considered. The

Foreign Patent Documents and the Japanese Office Actions have been considered.

However, the "Addressing Spam mail" article listed on the information disclosure

statement has no English translation, and no statement is given of the relevance of this

document.

Allowable Subject Matter

3.   The indicated allowability of claims 1-20 is withdrawn in view of the newly

discovered reference(s) to Milliken, Goodman and Knowles. Rejections based on the

newly cited reference(s) follow.

4.   Claim 12 is objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

Claim Objections

5.   Claims 11-14 are objected to because of the following informalities: Claims 11-

14 depend from claim 10. Claim 10 was amended to a non-transitory computer-

readable storage medium. Claims 11-14 disclose the computer-readable storage

medium of claim 10. Claims 11-14 should be amended to add "non-transitory" for

purposes of clarity and consistency with claim 10. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   Claims 1, 2, 4-6, 10, and 14-16 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

8.   Claims 1, 2, 4-6, 10, and 14-16 refer to URLs, but fail to define what the URL

abbreviation stands for within the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 1-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Milliken et al. (US 2004/0073617) in view of Goodman et al. (US

7,711,779).

11.   In regard to claim 1, Goodman disclosed a method comprising:

using one or more computer processors, extracting URLs from electronic

communication; and (column 7, lines 56-63, identifying a spam message based upon

the presence of a URL)

analyzing the URLs extracted to determine whether the electronic communication

is of a first predetermined category, (column 7, lines 56-63)

Goodman disclosed extracting URLs from electronic communications. Goodman

disclosed determining whether a email is spam based upon the presence or absence of

a URL. Goodman failed to disclose the step of generating signatures or hash values

based upon the content of the email message.

However, Milliken disclosed generating signatures or hash values based upon

the content of the email message (using a length of the electronic communication and

the URLs extracted). Milliken, [0050], where one or more portions of a received email

are hashed to produce a hash value. Any portion of the main text, or attachments may

be hashed. The hash acts as a signature in [0052].

It would have been obvious to one of ordinary skill in the art at the time of

invention to incorporate the hashing of an email to determine whether the email

constituted spam, into the Goodman system which used the presence or absence of

URLs to determine whether an email constituted spam, in order to build a more robust

spam prevention system.

12.   In regard to claim 2, Goodman disclosed the method of claim 1, wherein

extracting the URLs comprises extracting at least one of a hostname, a domain name, a

subsection of a domain relative link, and an Internet Protocol (IP) address from the

electronic communication. Goodman, col. 7, lines 58-63 and col. 13, lines 45-53. The

elements of at least one of a hostname, a domain name, a subsection of a domain

relative link, and an Internet Protocol (IP) address are inherently part of the URL as

disclosed in Goodman

13.   In regard to claim 3, Milliken disclosed the method of claim 1, further comprising

performing a predetermined operation on the electronic communication if the electronic

communication is determined to be of the first predetermined category. [0080], rejecting

message if suspicion score is high enough

14.   In regard to claim 4, Milliken disclosed the method of claim 1, wherein analyzing

the URLs comprises:

        selecting one or more of the one or more signatures generated; and [0054],

storing of hash values

        comparing the selected signatures against a plurality of predetermined

signatures generated from a plurality of known electronic communications of the first

predetermined category. [0082], checking hashed portions of a message with known

email lists which have been hashed

15.   In regard to claim 5, Milliken disclosed the method of claim 1, wherein generating

the one or more signatures further comprises:

        computing a first hash based on the length of the electronic communication;

computing a second hash …; and generating a signature by concatenating the first hash

to the second hash. Milliken disclosed hashing portions of an email, [0050]. A fixed

length of a hash is established in [0055]. Concatenating hashes is taught in [0086].

16.   Milliken failed to disclose an extracted URL was hashed.

17.   However, Goodman disclosed using the presence of a URL within an email to

determine whether an email was spam. Goodman, col. 7, lines 58-63 and col. 13, lines

45-53

18.   It would have been obvious to one of ordinary skill in the art at the time of invention that because Goodman detected whether an email was spam based upon the presence of a URL, and because therefore a URL would have been part of an email in Goodman, and because Milliken disclosed any portion of an email may be hashed, that a URL that was part of an email in Milliken would have been hashed.

19.   In regard to claim 6, Milliken disclosed the method of claim 4. Milliken, [0050], hashing one or more portions of a received email. Milliken failed to disclose an extracted URL was hashed.

20.   However, Goodman disclosed using the presence of a URL within an email to determine whether an email was spam. Goodman, col. 7, lines 58-63 and col. 13, lines 45-53

21.   It would have been obvious to one of ordinary skill in the art at the time of invention that because Goodman detected whether an email was spam based upon the presence of a URL, and because therefore a URL would have been part of an email in Goodman, and because Milliken disclosed any portion of an email may be hashed, that a URL that was part of an email in Milliken would have been hashed.

22.   In regard to claim 7, Milliken disclosed the method of claim 4, wherein generating the one or more signatures further comprises generating the one or more signatures based on at least one of a protocol, a hostname, a domain name, a subsection of a domain relative link, and an Internet Protocol (IP) address from the electronic communication. Milliken, [0096], hashing specific headers from an email separately, such as the use of Yahoo Groups

In regard to claim 8, Milliken disclosed the method of claim 4, further comprising classifying the electronic communication to be of the first predetermined category if one of the selected signatures matches one of the plurality of predetermined signatures. [0082], checking hashed portions of a message with known email lists which have been hashed

23.   In regard to claim 9, Milliken disclosed the method of claim 4, wherein the plurality of predetermined signatures is derived from a plurality of electronic documents reported via a collaborative submission mechanism. Milliken, [0061], preloading of hashes from "legitimate email list servers"

24.   In regard to claim 10, Milliken disclosed a non-transitory computer-readable storage medium that provides instructions that, if executed by a processor, will cause the processor to perform operations comprising:

generating one or more signatures of electronic communication using a length of the electronic communication…; and Milliken, [0050], where one or more portions of a received email are hashed to produce a hash value. Any portion of the main text, or attachments may be hashed. The hash acts as a signature in [0052].

determining whether the electronic communication is of a first predetermined category using the one or more signatures generated. Milliken, [0082], checking hashed portions of a message with known email lists which have been hashed to determine if a message is spam or suspicious.

Milliken failed to disclose hashing the URL extracted from a message.

25.   However, Goodman disclosed using the presence of a URL within an email to
determine whether an email was spam. Goodman, col. 7, lines 58-63 and col. 13, lines
45-53

26.   It would have been obvious to one of ordinary skill in the art at the time of
invention that because Goodman detected whether an email was spam based upon the
presence of a URL, and because therefore a URL would have been part of an email in
Goodman, and because Milliken disclosed any portion of an email may be hashed, that
a URL that was part of an email in Milliken would have been hashed.

27.   In regard to claim 11, Milliken disclosed the computer-readable storage medium
of claim 10, wherein determining whether the electronic communication is of the first
predetermined category comprises:

    selecting one or more of the one or more signatures generated based on a
plurality of predetermined criteria; [0068], hash the main text of the body and [0070],
hash the attachments of the email. Also see [0050]. The use of hash blocks in [0050] is
selecting a signature generated based on a plurality of predetermined criteria.

    comparing the selected signatures against a plurality of predetermined
signatures; and [0082], comparing hashes with previously received hashes

    classifying the electronic communication to be of the first predetermined category
if one of the selected signatures matches one of the plurality of predetermined
signatures. [0082]

28.   In regard to claim 13, Milliken disclosed the computer-readable storage medium
of claim 11, wherein selecting one or more of the one or more signatures generated

comprises selecting signatures representing one or more of a protocol, a hostname, a

domain name, and a subsection of a domain relative link having a predetermined string

of letters. Milliken, [0096], hashing specific headers from an email separately, such as

the use of Yahoo Groups

29.   In regard to claim 14, Goodman disclosed the computer-readable storage

medium of claim 10, wherein the operations further comprise extracting the URLs from

the electronic communication. (column 7, lines 56-63, identifying a spam message

based upon the presence of a URL)

30.   Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Milliken in view of Goodman in view of Knowles et al. (US 5,905,863).

31.   In regard to claim 15, Milliken disclosed a system comprising:

        a server, coupled to the plurality of databases, including: server 120, [0035]

                a memory device to store a plurality of instructions; and

                a processor, coupled to the memory device, to retrieve the plurality of

        instructions from the memory device and to perform operations in response to

        the plurality of instructions, the operations comprising:

                        generating one or more signatures of electronic communication

                using a length of the electronic communication...; and Milliken, [0050],

                where one or more portions of a received email are hashed to produce a

                hash value. Any portion of the main text, or attachments may be hashed.

                The hash acts as a signature in [0052].

determining whether the electronic communication is of a first

predetermined category using the one or more signatures generated.

Milliken, [0082], checking hashed portions of a message with known email

lists which have been hashed to determine if a message is spam or

suspicious.

Milliken failed to disclose hashing the URL extracted from a message.

32.   However, Goodman disclosed using the presence of a URL within an email to

determine whether an email was spam. Goodman, col. 7, lines 58-63 and col. 13, lines

45-53

33.   It would have been obvious to one of ordinary skill in the art at the time of

invention that because Goodman detected whether an email was spam based upon the

presence of a URL, and because therefore a URL would have been part of an email in

Goodman, and because Milliken disclosed any portion of an email may be hashed, that

a URL that was part of an email in Milliken would have been hashed.

34.   Milliken and Goodman failed to disclose a plurality of databases to store a

plurality of signatures of a plurality of known electronic communications of a first

predetermined category. Milliken did disclose comparing known signatures of email

messages. Milliken failed to disclose the signatures compared were stored in a plurality

of databases.

35.   However, Knowles did disclose use of multiple databases to compare message

content to determine if a message was a reply to another message. Knowles, column

5, lines 2-4 disclosed the multiple databases of different content, and column 5, lines

53-64 disclosed the querying of multiple databases of email content.

36.   It would have been obvious to one of ordinary skill in the art at the time of

invention that Milliken's hash signatures would have been storable in a plurality of

databases for purposes of data backups and storage of different types of data.

37.   In regard to claim 16, Goodman disclosed the system of claim 15, wherein the

URLs comprises at least one of a hostname, a domain name, a subsection of a domain

relative link, and an Internet Protocol (IP) address. Goodman, col. 7, lines 58-63 and

col. 13, lines 45-53. The elements of at least one of a hostname, a domain name, a

subsection of a domain relative link, and an Internet Protocol (IP) address are inherently

part of the URL as disclosed in Goodman

38.   In regard to claim 17, Milliken disclosed the system of claim 15, wherein the

operations further comprise selecting the one or more of the plurality of signatures

based on a plurality of predetermined criteria. [0068], hash the main text of the body

and [0070], hash the attachments of the email. Also see [0050]. The use of hash

blocks in [0050] is selecting a signature generated based on a plurality of predetermined

criteria.

39.   In regard to claim 18, Milliken disclosed the system of claim 15, wherein the

operations further comprise performing a predetermined operation on the electronic

communication if the electronic communication is determined to be of the first

predetermined category. Milliken, [0082], checking hashed portions of a message with

known email lists which have been hashed to determine if a message is spam or
suspicious.

40.   In regard to claim 19, Knowles disclosed the system of claim 15, further
comprising a database, coupled to the server, to store a plurality of reports from which
the plurality of predetermined signatures are generated. Knowles, col. 5, lines 55-58.

41.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Milliken
in view of Goodman in view of Knowles as applied to claim 15 above, and further in
view of Official Notice.

42.   In regard to claim 20, Milliken in view of Goodman in view of Knowles disclosed
the system of claim 15. The combined references failed to disclose wherein the plurality
of databases are in a remote location from the server. However, Official Notice is taken
that databases were commonly stored in remote locations from a server at the time of
invention to allow for remote storage of data and for emergency management
procedures in case of catastrophic events. It would have been obvious to one of
ordinary skill in the art at the time of invention to remotely store databases in the
Milliken/Goodman/Knowles combination.

Conclusion

43.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

44.   Sobel   US 7,293,063

45.   Oliver et al.   US 7,299,261

46.   Hong J C et al.   KR 2005024765A

47.   Cho H G et al.   KR 2005000015A

48.   Kissel   US 7,373,664

49.   Gordon et al.   US 6,732,157

50.   Kirsch   US 6,546,416

51.   Shipp   US 2004/0093384

52.   Pace et al.   US 6,460,050

53.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeffrey R. Swearingen whose telephone number is

(571)272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey R Swearingen
Examiner
Art Unit 2445

/Jeffrey R Swearingen/
Examiner, Art Unit 2445